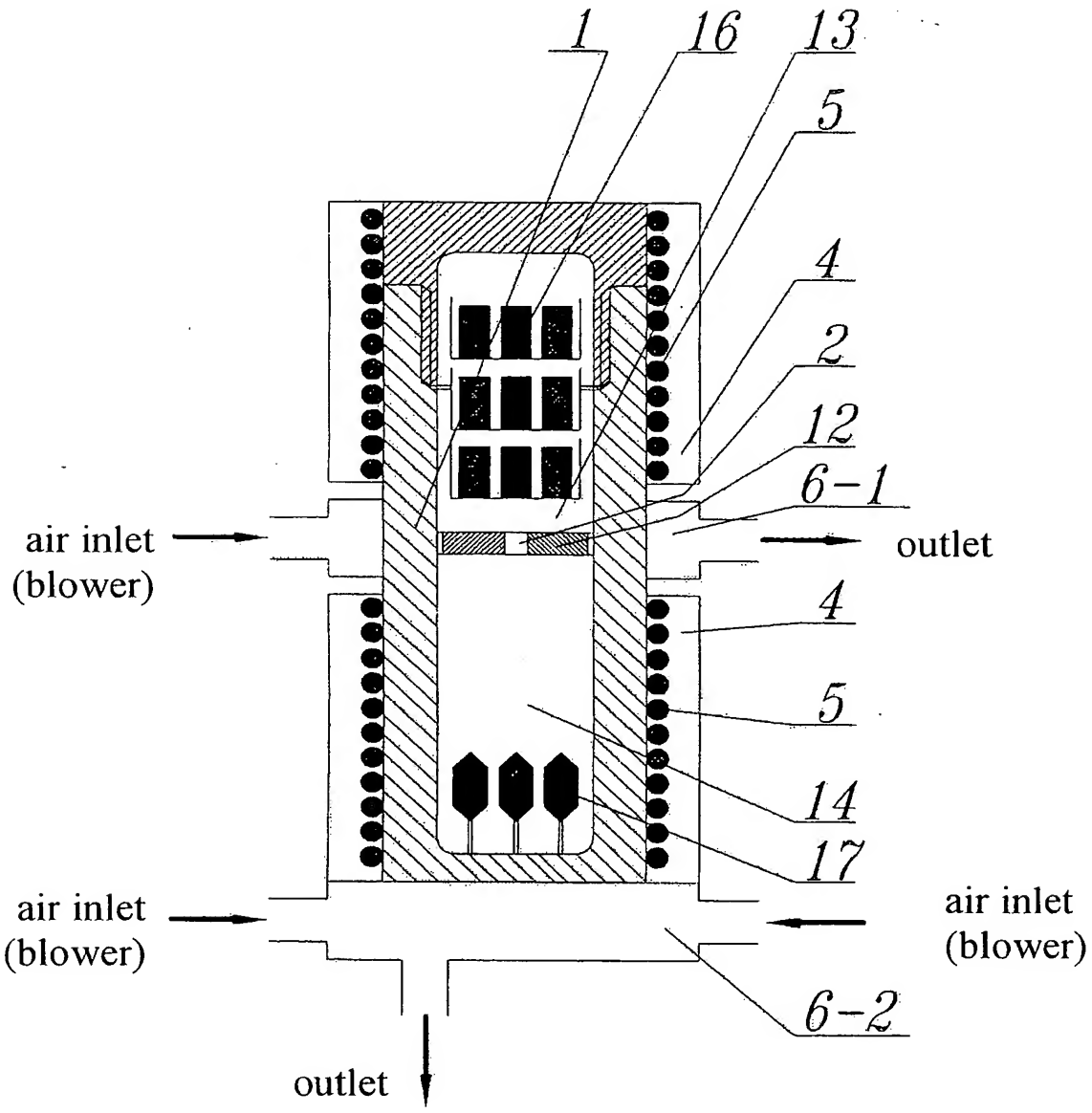

Fig. 1

BEST AVAILABLE COPY

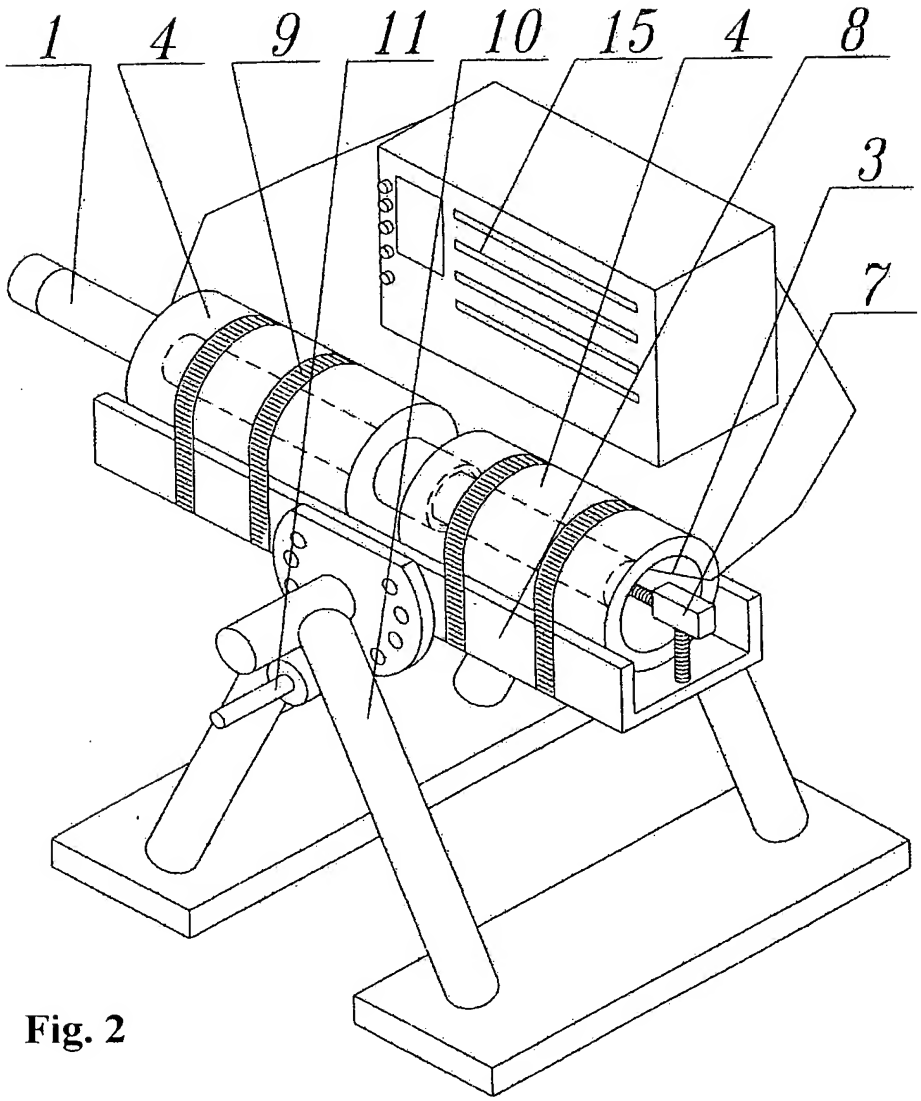

Fig. 2

BEST AVAILABLE COPY

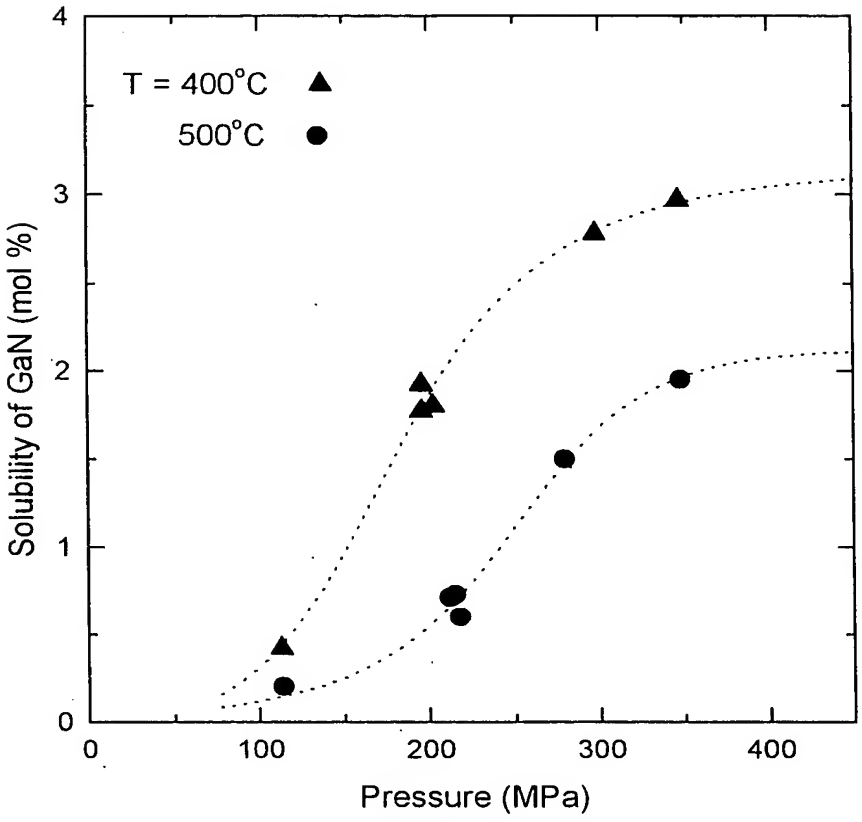
T = 400°C
500°C
Solubility of GaN (mol %)
Pressure (MPa)
0
1
2
3
4
0
100
200
300
400

Fig. 3

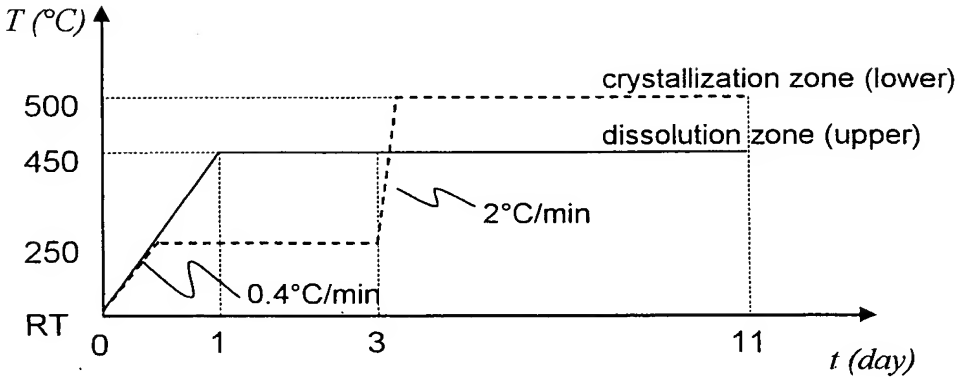
T (°C)
500
450
250
RT
0
1
3
11
t (day)
crystallization zone (lower)
dissolution zone (upper)
2°C/min
0.4°C/min

Fig. 4

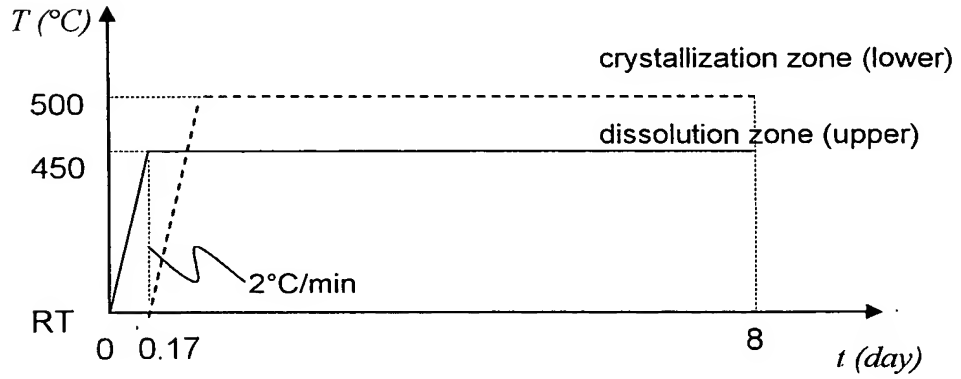
T (°C)
500
450
RT
0
0.17
8
t (day)
crystallization zone (lower)
dissolution zone (upper)
2°C/min

Fig. 5

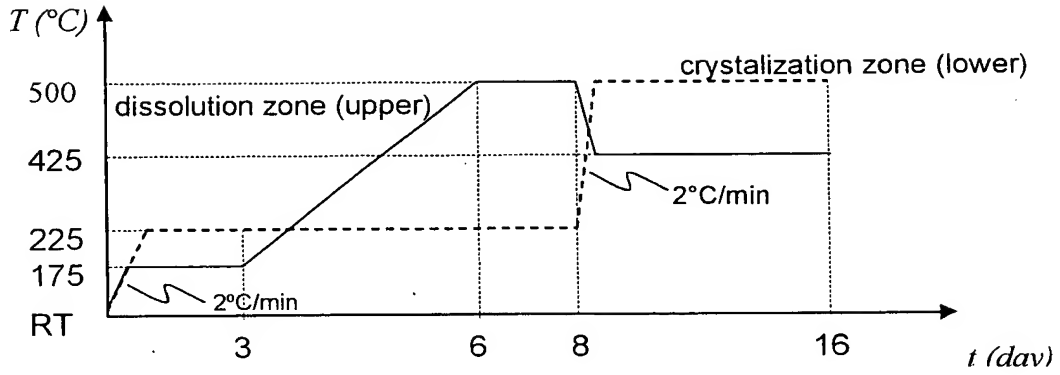
T (°C)
500
425
225
175
RT
dissolution zone (upper)
crystalization zone (lower)
2°C/min
2°C/min
3
6
8
16
t (dav)

Fig. 6

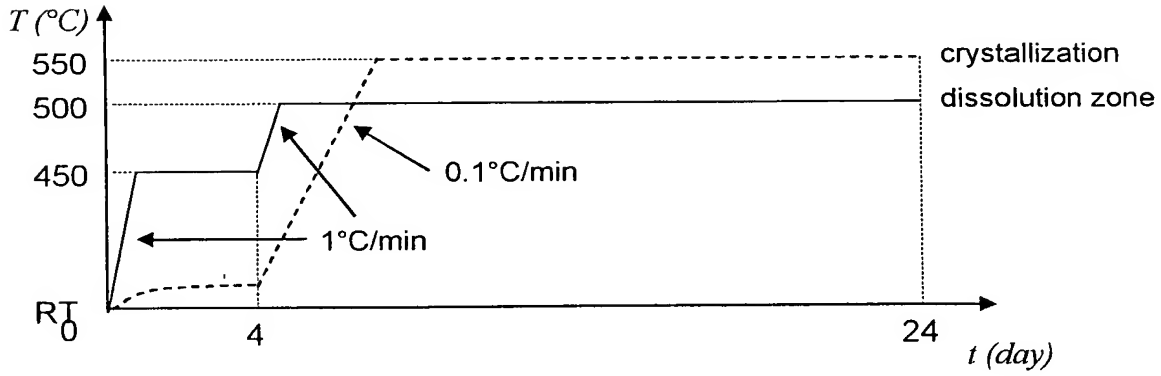
T (°C)
550
500
450
RT
0
4
24
t (day)
crystallization
dissolution zone
0.1°C/min
1°C/min

Fig. 7

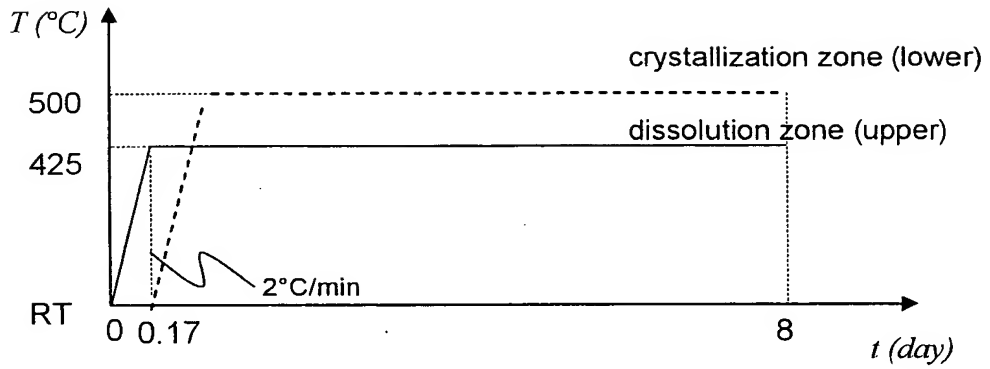
T (°C)
crystallization zone (lower)
500
dissolution zone (upper)
425
2°C/min
RT
0 0.17
8
t (day)

Fig. 8

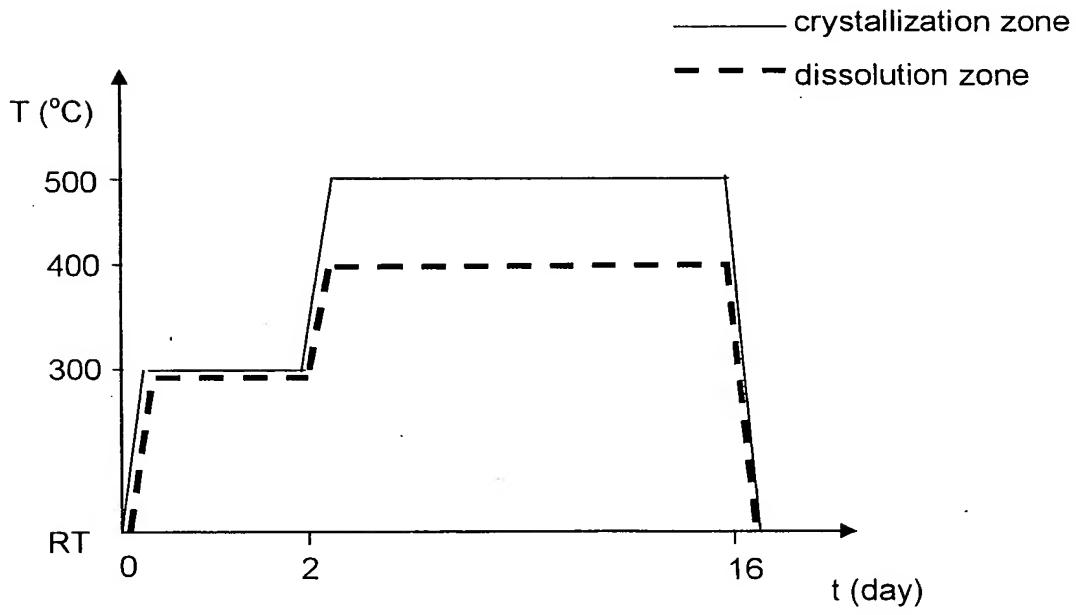
crystallization zone
dissolution zone
T (°C)
500
400
300
RT
0
2
16
t (day)

Fig. 9

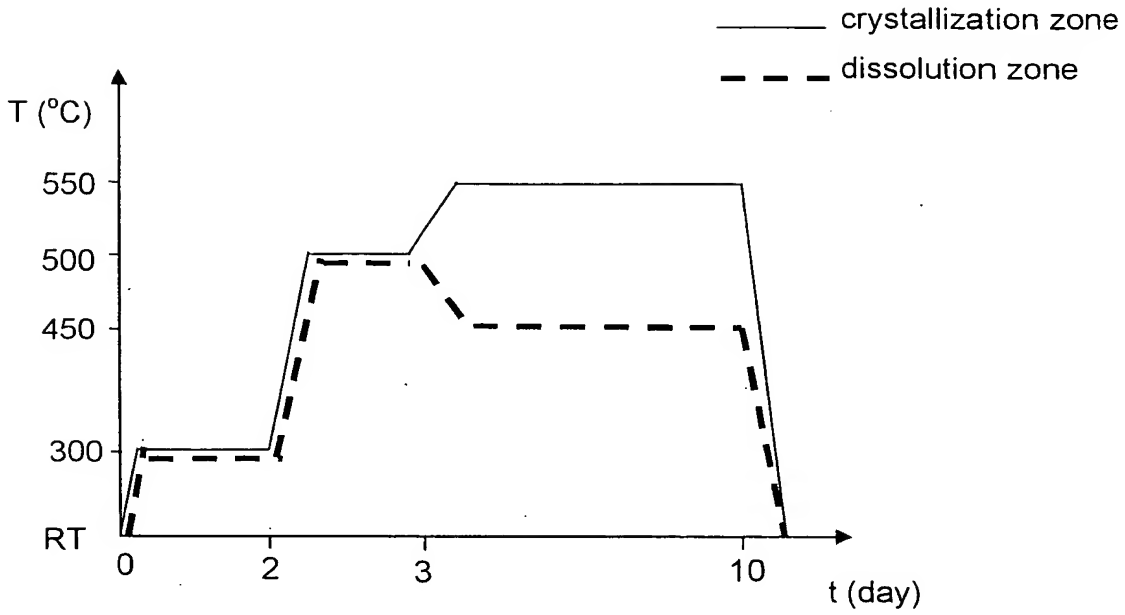
crystallization zone
dissolution zone
T (°C)
550
500
450
300
RT
0
2
3
10
t (day)

Fig. 10

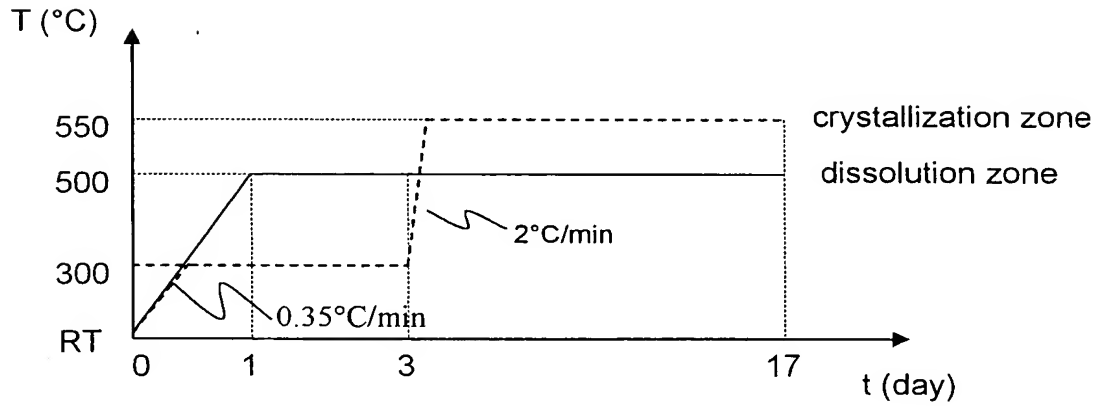
T (°C)
550
500
300
RT
crystallization zone
dissolution zone
2°C/min
0.35°C/min
0
1
3
17
t (day)

Fig. 11

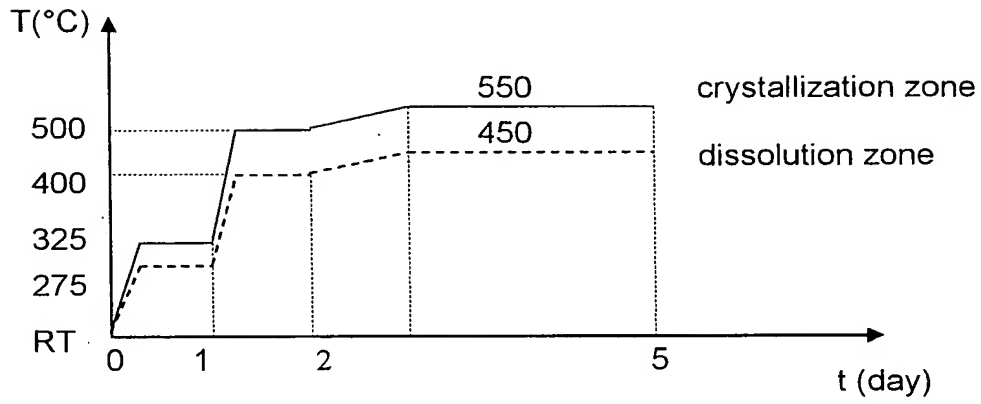
T(°C)
550
crystallization zone
500
450
dissolution zone
400
325
275
RT
0
1
2
5
t (day)

Fig. 12

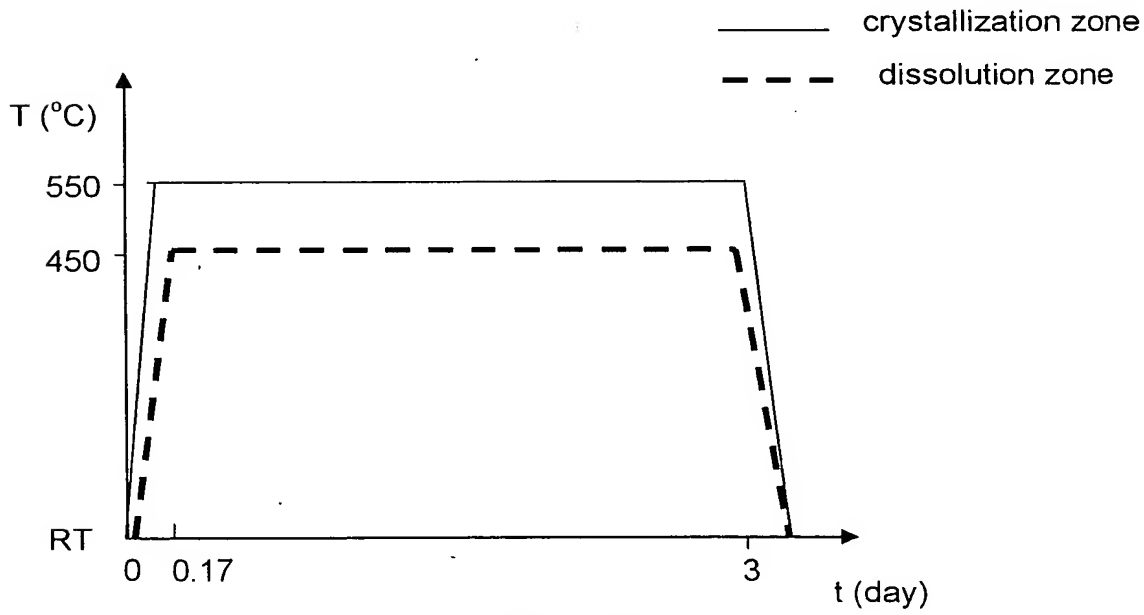
crystallization zone
dissolution zone
T (°C)
550
450
RT
0
0.17
3
t (day)

Fig. 13